

ANDREA DONNELLAN

Education

Ph.D., Geophysics, California Institute of Technology (1991)
M.S., Computer Science, University of Southern California (2003)
M.S., Geophysics, California Institute of Technology (1988)
B.S., Geology, Ohio State University, *with honors and distinction in geology and minor in math* (1986)

Professional Positions

Jet Propulsion Laboratory (1993 – present)
Principal Research Scientist (2008 – present)
InSAR Lead Scientist, (2005–2007); DESDynI pre-project scientist (2007–2008)
Deputy Manager, Science Division (2002–2005)
Deputy Manager, Exploration Systems Autonomy Section (2000–2002)
Principal Researcher, Information and Computer Science, Advanced Tech. R&D (2000–2001)
Supervisor, Data Understanding Systems Group (1999–2000)
Senior Researcher, Information and Computer Science, Advanced Tech. R&D (1999–2000)
Research Scientist, Satellite Geodesy and Geodynamics Systems Group (1997–1999)
Member Tech. Staff, Satellite Geodesy and Geodynamics Sys. Group (1993–1997)
University of Southern California, Adjunct Asst. Prof. (Research) of Earth Sci. (1999–2015)
California Institute of Technology, Visiting Assoc., Seismological Laboratory (1995–1996)
NASA Goddard Space Flight Center, National Res. Council Postdoctoral Fellow (1991–1993)
California Institute of Technology (1986–1991)
Graduate Research Assistant (1986–1991); Graduate Teaching Assistant (1987–1988)
Ohio State University (1983–1986)
Research Assistant, Institute for Polar Studies, Ohio State University (1983–1986)
Thin Section Laboratory Technician, Ohio State University (1983)
Geochemistry Group, Sohio Research and Development (1985)

Research Interests

Crustal deformation measurements of plate boundary systems using Interferometric Synthetic Aperture Radar (InSAR), UAVSAR, and Global Position System (GPS) geodetic imaging
Studying the underlying dynamics of earthquake fault systems and plate boundaries using geodetic and topographic imaging, numerical modeling, computational infrastructure, and pattern analysis
Developing science gateways and computational infrastructure to simplify access, analysis, and modeling of geodetic imaging data
Creating structure from motion digital elevation models from small UAVs to produce geomorphic metrics of fault zones
Mentoring and guiding research of undergraduate interns, graduate students, and faculty

Principal Investigator

Fault zone geomorphic metrics using structure from motion from small UAVs (2015–present)
GeoGateway for Analysis, Modeling, and Response Principal Investigator (2014 – present, \$1,685,230 over two funding cycles)
UAVSAR Geodetic Imaging Principal Investigator (2010–2016, \$1,592,900 over two funding cycles)
QuakeSim Principal Investigator (2002–2014, \$5,510,300 over three funding cycles)

Programmatic Experience

NASA Earth Surface and Interior Program CORE Steering committee member (2015–2016)

NASA HQ Program Area Co-Lead for Natural Disasters (2009–2011)
Responsible for program elements and strategic direction of program
Represented NASA on the White House Subcommittee for Disaster Reduction
Ex-officio member representing NASA, National Academy of Sciences Disaster Roundtable
Solid Earth Science Working Group for NASA HQ (2000–2002)
Solid Earth science chair for NASA workshop on computational technologies needs (2002)
Panel review member: NASA ESI (2002, 2016), USGS-NEHRP (1994–1999)
Review panel for NSF Polar Programs of Support Office for Aerogeophysical Research (1999)

JPL Additional Management

JPL Science and Technology Management Council (2001–2004)
Acting Deputy Director, JPL Center for Life Detection (2002–2003)
JPL Business Management Council (2002–2004)
JPL Science Advisory Group (1994–2001)
Discovery Program Step II, MIDEX Step I, ESSP Step I, Tech., Mgmt., and Cost Rev. Boards (2001)
Earth System Science Program Technical, Management, and Cost review board (2001)
Small Bus. Innovative Res. Prog. subtopic mgr. on knowledge discovery and data fusion (2000–2002)
Sensorweb steering committee (1999–2000)

Professional Organizations and Service

American Geophysical Union

Nonlinear Geophysics Focus Group President-Elect/President (2013–2014/2015–2016)
American Geophysical Union (AGU) nonlinear geophysics committee (2000–2005)
2000 and 2001 Spring Meeting program committee geodesy section chair (2000–2001)
Geodesy representative for education and outreach (1999)

APEC Cooperation on Earthquake Simulation

US Representative to the International Science Board (2000–present)

Global Geodetic Observing System (GGOS) Science Panel Member (2006–2015)

National Academy of Sciences

Committee on Spatial Data Enabling USGS Strategic Science in the 21st Century (2010)

Advisory Boards/Groups

QuakeFinder (2004)

Graphic Films: Forces of Nature IMAX movie (2001)

Plate Boundary Observatory steering committee (1999–2003)

General Earthquake Models (GEM)

Program planning committee co-chair (1998–2001);

Data committee co-chair (1999–2000)

Southern California Earthquake Center (SCEC)

Crustal Deformation Working Group (1993–2000)

Development Oversight of SCEC GPS Educational Modules (1996–2000)

Southern California Integrated GPS Network (SCIGN)

Coordinating Board (SCEC rep: 1994–1998; NASA rep: 1999–2001)

Coordinating Board proposal committee chair (1994–1997)

Phase I network committee (1995–1997)

UNAVCO Field Operations Working Group, Chair (1995–1997)

Member

American Geophysical Union (1986–present)

Seismological Society of America (2000–2003, 2012, 2015–present)

IEEE, and IEEE Geoscience and Remote Sensing Society (2016–present)
AAAS (2016–present)

Editor

AGU Earth and Space Science Journal (2014 – present)
PAGEOPH Topical Vol. editor: "Multihazard Simulation and Cyberinfrastructure (2013–2014)
ISRN Geophysics, Editorial Board (2012 – 2014)
Editor ACES PAGEOPH special volume on earthquake simulations (2003)

Convener

NASA Earth Obs. Missions Applications Workshop (Colorado Springs, 2010)
DESDynI Applications Workshop (Sacramento, 2008)
NSF/NASA Sponsored Community InSAR Workshop (Oxnard, 2003)
NSF/NASA Sponsored Autonomous Systems in Extreme Environments Workshop (1999)
Southern California Integrated GPS Network (SCIGN) network design workshops (1995 and 1997)

Awards

Major

QuakeSim 2.0: NASA Software of the Year Award Co-Winner (2012)
MUSES California Science Center Foundation, Woman of the Year (2006)
Women in Aerospace Award for Outstanding Achievement (2003)
Presidential Early Career Award for Scientists and Engineers (1996)
National Research Council Postdoctoral Fellowship (1991–1993)

NASA

NASA Group Achievement Award for *Response to the 2015 Nepal Gorkha Earthquake* (2016)
NASA Group Achievement Award for *Response to the 2010 Gulf Oil Spill* (2011)
Simplex V8: NASA Space Act Award (2012)
GeoFESTv.4.8 NASA Space Act Award (2009)
NASA Space Act awards for QuakeSim, Simplex, and Disloc (2005)
NASA Space Act Award for GeoFESTv.4.3 finite element software (2004)

JPL

JPL Low Allen Award for Excellence (2000)
JPL Team Award for developing products for the Nepal Earthquake (2015)
JPL Research Poster Conference Award for Assessing Measurements for Glacier Mass Balance (2015)
JPL Discovery Award (2013)
Team bonus award for QuakeSim Parallel GeoFest development (2004)

Other

Donnellan Glacier, Advisory Committee on Antarctic Names (2006); Antarctic Service Medal (1985)
Women at Work Medal of Excellence (2004)
Southern California Earthquake Center Outreach Award for Education (1998)
Outstanding Student Paper Award, Geodesy Section, Fall AGU Meeting (1990)
Amoco Scholarship (1985); Undergraduate Research Scholarship, Ohio State University (1985–1986)
Ohio State University Field Camp Scholarship and Outstanding Student Award (1985)

Peer-Reviewed Publications

[1] Rundle, J.B., **A. Donnellan**, L. Grant Ludwig, D.L. Turcott, M. Luginbuhl, and G. Gong, in press, Nowcasting Earthquakes, Earth and Space Science.

- [2] Parker, J., M. Glasscoe, **A. Donnellan**, T. Stough, M. Pierce, J. Wang, 2016, Radar Determination of Fault Slip and Location in Partially Decorrelated Images, *Pure and Applied Geophysics*, doi:10.1007/s00024-016-1403-z.
- [3] DeLong, S.B., **A. Donnellan**, D.J. Ponti, R.S. Rubin, G. Seitz, D.P. Schwartz, C.S. Prentice, T.E. Dawson, J.J. Lienkaemper, K.W. Hudnut, C. Rosa, A. Pickering, J.W. Parker, in press, Tearing the terroir: Details and implications of surface rupture and deformation from the 24 August 2014 M6.0 South Napa earthquake, California, *Earth and Space Science*.
- [4] **Donnellan, A.**, R. Arrowsmith, V. Langenheim, 2016, Select Airborne Techniques for Mapping and Problem Solving, in *Applied Geology in California* (book), eds. R. Anderson and H. Ferriz, Star Publishing, California, pp 541-566.
- [5] Rundle, J.B., J.R. Holliday, W.R. Graves, P.B. Rundle, B. Jeremic, S. Kunnath, R. Feltstykkt, K. Mayeda, D.L. Turcotte, **A. Donnellan**, 2016, A Practitioner's Guide to Operational Real Time Earthquake Forecasting, in *Applied Geology in California* (book), eds. R. Anderson and H. Ferriz, Star Publishing, California, pp 983-1003.
- [6] Kargel, J.S., G.J. Leonard, D.H. Shugar, U.K. Haritashya, A. Bevington, E.J. Fielding, K. Fujita, M. Geertsema, Evan S. Miles, Jakob Steiner, S. Bajracharya, G.W. Bawden, D.F. Breashears, B. Collins, M.R. Dhital, **A. Donnellan**, M.T. Glasscoe, D. Green, K. Hudnut, C. Huyck, W.W. Immerzeel, N.R. Khanal, D. Kirschbaum, P.D.A. Kraaijenbrink, D. Lamsal, LIU Shiyin, D. McKinney, T.H. Painter, M. Pleasants, A. Sakai, SHANGGUAN Donghui, J.M. Shea, A.B. Shrestha, D. Stumm, M. van der Kooij, M.R. Yoder, Eric Anderson, Alton Byers, E. Czyzowska-Wisniewski, Teresa L. Evans, Marie-Laure Geai, Deo Raj Gurung, R. Heijenk, A. Hilborn, JIANG Liming, Randall Jibson, A. Kääb, LV Mingyang, N.K. Nahirnick, NAN Zhuotong, S. Ojha, J. Olsenholler, K.C. Pratima, QI Yuan, B. Raup, D. Regmi, David R. Rounce, A. Shukla, K. Voss, WANG Xin, Brandon Weihs, David Wolfe, WU Lizong, YAO Xiaojun, and Neal Young, 2015, Geomorphic and geologic controls of geohazards induced by Nepal's 2015 Gorkha earthquake, *Science*, DOI: 10.1126/science.aac8353.
- [7] Yoder, M.R., K.W. Schultz, E.M. Heien, J.B. Rundle, D.L. Turcotte, J.W. Parker, **A. Donnellan**, 2015, The Virtual Quake earthquake simulator: A simulation based forecast of the El Mayor-Cucapah region and evidence of earthquake predictability, *Geophys. J. Int.*, 203, 1587-1604, doi: 10.1093/gji/ggv320.
- [8] Yoder, M.R., K.W. Schultz, E.M. Heien, J.B. Rundle, D.L. Turcotte, J.W. Parker, **A. Donnellan**, 2015, Forecasting earthquakes with the Virtual Quake simulator: Regional and fault-partitioned catalogs, in series *International Association of Geodesy Symposia*, doi: 10.1007/1345_2015_198.
- [9] Schultz, K.W., M.K. Sachs, M.R. Yoder, J.B. Rundle, D.L. Turcotte, E.M. Heien, **A. Donnellan**, 2015, Virtual Quake: Statistics, Co-seismic Deformations and Gravity Changes for Driven Earthquake Fault Systems, Chapter in series *International Association of Geodesy Symposia*, Springer Berlin Heidelberg, pp 1-9, 10.1007/1345_2015_134.
- [10] **Donnellan, A.**, L. Grant Ludwig, J.W. Parker, J.B. Rundle, J. Wang, M. Pierce, G. Blewitt, S. Hensley, 2015, Potential for a large earthquake near Los Angeles inferred from the 2014 La Habra earthquake, *Earth and Space Sci*, 2, 378–385, DOI: 10.1002/2015EA000113.
- [11] Schultz, K.W., M.K. Sachs, E.M. Heien, J.B. Rundle, D.L. Turcotte, and **A. Donnellan**, 2015) Simulating Gravity Changes in Topologically Realistic Driven Earthquake Fault Systems: First Results, *Pure and Applied Geophysics* special topical volume Multihazard Simulation and Cyberinfrastructure, 172, doi: 10.1007/s00024-014-0926-4.
- [12] Wei, S., J-P. Avouac, K.W. Hudnut, **A. Donnellan**, J.W. Parker, R.W. Graves, E. Fielding, Z. Liu, F. Cappa, and M. Eneva, 2015, The 2012 Brawley Swarm Triggered by Injection-Induced Aseismic Slip, *Earth and Planetary Science Letters*, 422, 115-125.

- [13] Wang, J., M. Pierce, **A. Donnellan**, J. Parker, 2015, Web Services for Dynamic Coloring UAVSAR Images, Pure and Applied Geophysics, Report Topical Volume, Multihazard Simulation and Cyberinfrastructure, 172, DOI: 10.1007/s00024-014-0941-5.
- [14] **Donnellan, A.**, J. Parker, S. Hensley, M. Pierce, J. Wang, J. Rundle, 2014, UAVSAR Observations of Triggered Slip on the Imperial, Superstition Hills, and East Elmore Ranch Faults Associated with the 2010 M 7.2 El Mayor - Cucapah Earthquake, Geochemistry, Geophysics, Geosystems, 15, doi: 10.1002/2013GC005120.
- [15] **Donnellan, A.**, J.W. Parker, J. Wang, Y. Ma, M. Pierce, 2014, Cloud Computing for Geodetic Imaging Data Processing, Analysis, and Modeling, IEEE Aerospace Conference, Big Sky, MT, March 2–7, 2014.
- [16] **Donnellan, A.**, B. Bills, J. Green, R. Goullioud, S. Jones, R. Knight, M. Underhill, J. Goguen, E.M. De Jong, A. Ansar, T. Scambos, P. Morin, B. Hallet, L. Thompson, A.S. Gardner, J. Ekholm, 2014, Studying Mountain Glacier Processes Using a Staring Instrument, IEEE Aerospace Conference, Big Sky, MT, March 2–7.
- [17] **Donnellan, A.**, 2014) Earth System Models, in Encyclopedia of Remote Sensing, Springer, EG Njoku (ed.), DOI 10.1007/978-0-387-36699-9, 146-150.
- [18] Glasscoe, M., J. Wang, M. Pierce, M.R. Yoder, J.W. Parker, M.C. Burl, T.M. Stough, R.A. Granat, **A. Donnellan**, J.B. Rundle, Y. Ma, G.W. Bawden, 2014, E-DECIDER: Using Earth Science Data and Modeling Tools to Develop Decision Support for Earthquake Disaster Response, Pure and Applied Geophysics, Report Topical Volume, Multihazard Simulation and Cyberinfrastructure, DOI: 10.1007/s00024-014-0824-9.
- [19] Parker, J., **A. Donnellan**, M. Glasscoe, G. Fox, M. Pierce, J. Wang, Y. Ma, 2014, Advantages to Geoscience and Disaster Response from the QuakeSim Implementation of Interferometric Radar Maps in a GIS Database System, Pure and Applied Geophysics, Report Topical Volume, Multihazard Simulation and Cyberinfrastructure, 127, 2295-2308, DOI:10.1007/s000024-014-0886-8.
- [20] Glasscoe, M.T., J. Wang, M.E. Pierce, M.R. Yoder, J.W. Parker, M.C. Burl, T. Stough, Y. Ma, J.B. Rundle, G.W. Bawden, in review, **A. Donnellan**, and R. Blom, E-DECIDER: Decision Support Tools for Earthquake Disaster Response, in New Trends in Earth Science Outreach and Engagement: The Nature of Communication, AGU Monograph.
- [21] **Donnellan, A.**, M. Glasscoe, J. Parker, R. Granat, M. Pierce, J. Wang, G. Fox, D. McLeod, J. Rundle, E. Heien, L. Grant Ludwig, 2013, Integrating Remotely Sensed and Ground Observations for Modeling, Analysis, and Decision Support, IEEE Aerospace Conference, March 2, 2013, Big Sky, MT, DOI: 10.1109/AERO.2013.6497163.
- [22] **Donnellan, A.**, J.J. Green, .M. De Jong, R. Knight, B. Bills, R. Arrowsmith, High resolution imaging of dynamic surface processes from the ISS, IEEE Aerospace Conference, March 2, 2013, Big Sky, MT,
- [23] Committee on Spatial Data Enabling USGS Strategic Science in the 21st Century; Mapping Science Committee; Board on Earth Sciences and Resources; Division on Earth and Life Studies; National Research Council, R. Denaro (Chair), G. Brimhall, R. Chen, **A. Donnellan**, M. Emch, I. Jackson, J. Kelmelis, X. Lopez, D. Ojima, B. Scanlon, 2012, *Advancing Strategic Science: A Spatial Data Infrastructure Roadmap for the U.S. Geological Survey*, ISBN 978-0-309-26457-0, 132 pages.
- [24] Wang, J., M. Pierce, Y. Ma, G. Fox, **A. Donnellan**, J. Parker, and M. Glasscoe, 2012, Using Service-Based GIS to Support Earthquake Research and Disaster Response, *Computing in Science and Engineering*, 14, 21-30, September.
- [25] **Donnellan, A.**, J. Parker, M. Glasscoe, E. De Jong, M. Pierce, G. Fox, D. McLeod, J. Rundle, L. Grant Ludwig, 2012, A Distributed Approach to Computational Earthquake Science: Opportunities and Challenges, *Computing In Science And Engineering*.

- [26] **A. Donnellan**, J. Parker, R. Granat, E. De Jong, S. Suzuki, M. Pierce, G. Fox, J. Rundle, D. McLeod, R. Al-Ghanmi, L. Grant Ludwig, 2012, QuakeSim: Integrated modeling and analysis of geologic and remotely sensed data, IEEE Aerospace Conference, Big Sky, Montana, March 3, 2012.
- [27] Rundle, J.B., J.R. Holliday, M. Yoder, M.K. Sachs, **A. Donnellan**, D.L. Turcotte, K.F. Tiampo, W. Klein, L.H. Kellogg, 2011, Earthquake precursors: activation or quiescence, *Geophys. J. Int.*, 187, 225-236, DOI: 10.1111/j.1365-246X.2011.05134.x.
- [28] Van Aalsburg, J., L.B. Grant, P.B. Rundle, G. Yakovlev, J.B. Rundle, D.L. Turcotte, **A. Donnellan**, K.F. Tiampo, J. Fernandez-Torres, I. Dobson, 2010, Space- and time- dependent probabilities for earthquake fault systems from numerical simulations: Feasibility study and first results, *PAGEOPH*, 167, 967-977, DOI: 10.1007/s00024-010-0091-3.
- [29] Glasscoe, M.T., R.A. Granat, J.B. Rundle, P.B. Rundle, **A. Donnellan**, L.H. Kellogg, 2009, Analysis of emergent fault element behavior in Virtual California, *Concurrency and Computation: Practice and Experience*, 9999, 1532-0626.
- [30] Plag, H-P, Z. Altamimi, S. Beddatpur, G. Beutler, G. Beyerle, A. Casanave, D. Crossley, **A. Donnellan**, R. Forsburg, R. Gross, J. Hinderer, A. Komjathy, C. Ma, A.J. Mannucci, C. Noll, A. Nothnagel, E.C. Pavlis, M. Pearlman, P. Poli, U. Schreiber, K. Senior, P.L. Woodworth, S. Zerbini, C. Zuffada, 2009, The Goals, Achievements, and Tools of Modern Geodesy, chapter in Global Geodetic Observing System, Meeting the Requirements of a Global Society on a Changing Planet in 2020, H-P. Plag, and M. Pearlman, eds., Springer-Verlag, Berlin Heidelberg, 15-88.
- [31] Rothacher, M., G. Beutler, D. Behrend, **A. Donnellan**, J. Hinderer, C. Ma, C. Noll, J. Oberst, M. Pearlman, H-P. Plag, B. Richter, T. Schöne, G. Tavernier, P. L. Woodworth, 2009, The future Global Geodetic Observing System, in 2020, H-P. Plag, and M. Pearlman, eds., Springer-Verlag, Berlin Heidelberg, 237-272.
- [32] **Donnellan, A.**, J. Parker, R. Granat, G. Fox, M. Pierce, J. Rundle, D. McLeod, R. Al-Ghanmi, L. Grant, W. Brooks, 2008, QuakeSim: Efficient Modeling of Sensor Web Data in a Web Services Environment, IEEE Aerospace Conference, Big Sky, Montana, March 1, 2008.
- [33] Pierce, M.E., G.C. Fox, G. Aydin, Z. Qi, **A. Donnellan**, J. Parker, R. Granat, 2008, Quakesim: Web services, portals, and infrastructure for geophysics, IEEE Aerospace Conference, Big Sky, Montana, March 1, 2008.
- [34] **Donnellan, A.**, H. Zebker, and K. J. Ranson, 2008, Radar and Lidar Measurement of Terrestrial Processes, *Eos Trans. AGU*, 89(38), 349–350, doi:10.1029/2008EO380002.
- [35] **Donnellan, A.**, P. Rosen, J. Graf, A. Loverro, A. Freeman, R. Treuhaft, R. Oberto, M. Simard, E. Rignot, R. Kwok, X. Pi, J.B. Blair, W. Abdalati, J. Ranson, H. Zebker, B. Hager, H. Shugart, M. Fahnestock, R. Dubayah, 2008, Deformation, ecosystem structure, and dynamics of ice (DESDynI), IEEE Aerospace Conference, Big Sky, Montana, March 1, 2008.
- [36] Parker J., Lyzenga G., Norton C., Zuffada C., Glasscoe M., 2008, Lou J., **Donnellan A.**, Geophysical finite-element simulation tool (GeoFEST): Algorithms and validation for quasistatic regional faulted crust problems, *PAGEOPH*, 165, 497-521.
- [37] Van Aalsburg, J., L.B. Grant, G. Yakovlev, P.B. Rundle, J.B. Rundle, D.L. Turcotte, **A. Donnellan**, 2007, A feasibility study of data assimilation in numerical simulations of earthquake fault systems, *Phys. of the Earth and Planetary Interiors*, 163, 149–162.
- [38] Tralli, D.M., R.G. Blom, E.J. Fielding, **A. Donnellan**, 2007, Conceptual case for assimilating interferometric synthetic aperture radar data into the HAZUS-MH earthquake module, *IEEE Trans. of Geosci. and Remote Sensing*, 45, 1595–1604.

- [39] **Donnellan, A.**, J. Parker, C. Norton, G. Lyzenga, M. Glasscoe, G. Fox, M. Pierce, J. Rundle, D. McLeod, L. Grant, W. Brooks, T. Tullis, 2007, QuakeSim: Enabling Model Interactions in Solid Earth Science Sensor Webs, 2007 IEEE Aerospace Conference, Big Sky, Montana, March 3, 2007.
- [40] Holliday, J.R., C.C. Chen, K.F. Tiampo, J.B. Rundle, D.L. Turcotte, **A. Donnellan**, 2007, A RELM earthquake forecast based on pattern informatics, *Seism. Res. Lett.* 78, 87–93.
- [41] Holliday, J.R., J.B. Rundle, K.F. Tiampo, W. Klein, **A. Donnellan**, 2006, Modification of the pattern informatics method for forecasting large earthquake events using complex eigenfactors, *Tectonophysics*, 413, 87–91.
- [42] Rundle, J.B., P.B. Rundle, **A. Donnellan**, P. Li, W. Klein, G. Morein, D.L. Turcotte, L. Grant, 2006, Stress transfer in earthquakes, hazard estimation and ensemble forecasting: Inferences from numerical simulations, *Tectonophysics*, 413, 109–125.
- [43] Yin, X., P. Mora, **Donnellan, A.**, Matsu-ura, M. eds., 2006, Computational Earthquake Physics, Parts I and II, *PAGEOPH*, 163, 1730–1740 and 2259–2261.
- [44] **Donnellan, A.**, J. Rundle, G. Fox, D. McLeod, L. Grant, T. Tullis, M. Pierce, J. Parker, G. Lyzenga, R. Granat, M. Glasscoe, 2006, QuakeSim and the Solid Earth Research Virtual Observatory, *PAGEOPH*, 163, 2263–2279.
- [45] Aktas, M., Aydin, G., **Donnellan, A.**, Fox, G., Granat, R., Grant, L., Lyzenga, G., McLeod, D., Pallickara, S., Parker, J., Pierce, M., Rundle, J., Sayar, A., Tullis, T., 2006, ISERVO: Implementing the International Solid Earth Research Virtual Observatory by integrating computational grid and geographical information Web Services, *PAGEOPH*, 163, 2281–2296.
- [46] Holliday, J.R., Rundle, J.B., Tiampo, K.F., Klein, W., **Donnellan, A.**, 2006, Systematic procedural and sensitivity analysis of the Pattern Informatics method for forecasting large, $M > 5$ earthquake events in Southern California, *PAGEOPH*, 163, 2433–2454.
- [47] Rundle, J.B.; Turcotte, D.L.; Rundle, P.B.; Shcherbakov, R.; Yakovlev, G.; **Donnellan, A.**; Klein, W., 2006, Pattern dynamics, pattern hierarchies, and forecasting in complex multi-scale earth systems, *Hydrology and Earth System Sciences*, 10, 789–796.
- [48] Holliday, J.R., Rundle, J.B., Turcotte, D.L., Klein, W., Tiampo, K.F., **Donnellan, A.**, 2006, Space-time clustering and correlations of major earthquakes, *Phys. Rev. Lett.*, 97, 238501.
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- [50] Rundle, J.B., P.B. Rundle, **A. Donnellan**, D.L. Turcotte, R. Shcherbakov, P. Li, B.D. Malamud, L.B. Grant, G.C. Fox, D. McLeod, G. Yakovlev, J. Parker, W. Klein, K.F. Tiampo, 2005, A simulation-based approach to forecasting the next great San Francisco earthquake, *Proceedings of the National Academy of Sciences*, **102**, 15363–15367.
- [51] Tralli, D.M., R.G. Blom, V. Zlotnicki, **A. Donnellan**, D.L. Evans, 2005, Satellite Remote Sensing of earthquake, volcano, flood, landslide, and coastal inundation hazards, *ISPRS Journal of Photogrammetry and Remote Sensing*, **59**, 185–198.
- [52] Grant L.B., **A. Donnellan**, D. McLeod, M. Pierce, G.C. Fox, A.Y. Chen, M.M. Gould¹, S.S. Sung, P.B. Rundle, 2005, A Web Services-Based Universal Approach to Heterogeneous Fault Databases, *Computing in Science and Engineering Special Issue on Multi-Physics Modeling*, **7**, 51–57.
- [53] **Donnellan, A.**, P. Mora, Matsu-ura, M., X. Yin eds., 2004, Computational Earthquake Science, Parts I and II, *PAGEOPH*, 161, 1823–1825 and 2119–2112.
- [54] Rundle, J.B., P.B. Rundle, **A. Donnellan**, and G. Fox, 2004, Gutenberg-Richter Statistics in Topologically Realistic System-Level Earthquake Stress-Evolution Simulations, *Earth, Planets, and Space*, 56, 761–771.
- [55] **Donnellan, A.**, and B. Luyendyk, 2004, GPS Evidence for a Coherent Plate and for Postglacial Rebound in Marie Byrd Land, West Antarctica, *Global and Planetary Change*, 42, 305–311.

- [56] **Donnellan, A.**, J. Rundle, J. Ries, G. Fox, M. Pierce, J. Parker, R. Crippen, E. DeJong, B. Chao, W. Kuang, D. McLeod, M. Mastu'ura, J. Bloxham, 2004, Illuminating the Earth's Interior Through Advanced Computing, *Computing in Science and Engineering (CiSE)*, 6, 36-44.
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White Papers

- [1] **Donnellan, A.**, R. Arrowsmith, Y. Ben-Zion, J. Rundle, L. Grant Ludwig, M. Glasscoe, A. Ansar, J. Green, J. Parker, E. De Jong, P. Lundgren, K. Reicherter, T. Scambos, 2016, Connecting Plate Boundary Processes to Earthquake Faults using Geodetic and Topographic Imaging, White paper submitted to RFI #2 for the 2017 Decadal Survey for Earth Science and Applications from Space.
- [2] J. L. Davis, L. H. Kellogg, J. R. Arrowsmith, B. A. Buffett, C. G. Constable, **A. Donnellan**, E. R. Ivins, G. S. Mattioli, S. E. Owen, M. E. Pritchard, M. E. Purucker, D. T. Sandwell, and J. Sauber, 2016, Challenges and Opportunities for Research in ESI (CORE), Report from the NASA Earth Surface and Interior (ESI) Focus Area Workshop, November 2–3, 2015, Arlington, Virginia.
- [3] **Donnellan, A.**, B. Hallet, S. Leprince, study leads, 2015, Gazing at the Solar System: Capturing the Evolution of Dunes, Faults, Volcanoes, and Ice from Space, Report of the Keck Institute for Space Studies Workshop, June 16 – 20, 2014, California Institute of Technology, 54 pp.
- [4] **Donnellan, A.**, Bawden, G., Rundle, J., eds., 2009, Report of the DESDynI Applications Workshop, October 29–31, 2008, UC Sacramento Conference Center, Sacramento, California.

- [5] Bardet (Chair), J.P., D. Ballantyne, G.E.C. Bell, **A. Donnellan**, S. Foster, T.S. Fu, J. List, R.G. Little, T.D. O'Rourke, and M.C. Palmer, 2010, Expert Review of Water System Pipeline Breaks in The City of Los Angeles – Summer 2009, Report to Los Angeles City Council, April 13, 2010.
- [6] Elachi, C., **A. Donnellan**, 2008, Preparing L.A. for Potential Earthquakes: Applications of Space Technology, Art Center College of Design, The Los Angeles Earthquake Sourcebook, November 2008.
- [7] Zebker, H., H. Shugart, M. Fahnestock, eds, m K. Bergen, S. Buckley, C. Dobson, **A. Donnellan**, R. Dubayah, Y. Fialko, E. Fielding, R. Forster, T. Freeman, B. Hager, F. Hall, R. Houghton, K. Jezek, M. Lefsky, A. Loverro, B. Pichel, H-P. Plag, E. Rignot, P. Rosen, S. Saatchi, and R. Wynne, 2007, Report of the July 17–19, 2007 Orlando, Florida Workshop to Assess the National Research Council Decadal Survey Recommendation for the DESDynI Radar/Lidar Space Mission.
- [8] Zebker, H., J. Andrews, **A. Donnellan**, Y. Fialko, M. Glasscoe, B. Holt, K. Jezek, I. Joughin, S. Lehner, B. Minster, P. Rosen, J. Runble, J. Sauber, M. Simons, W. Thatcher, 2005, InSAR Workshop Summary Report, October 20–22, 2004.
- [9] Solomon, S.C., V.R. Baker, J. Bloxham, D. Burbank, B.F. Chao, A. Chave, **A. Donnellan**, A. Gillespie, T. Herring, R. Jeanloz, B. Minster, W.C. Pitman III, E. Rignot, M. Simons, D.L. Turcotte, M.L.C. Zoback, 2003, Living on a Restless Planet, Solid Earth Science Working Group Report, NASA/JPL.
- [10] **Donnellan, A.**, J. Ries, J. Rundle, G. Fox, J. Parker, R. Crippen, E. De Jong, B. Chao, W. Kuang, 2002, NASA Earth Science Enterprise Computational Technology Workshop, Solid Earth Science Summary.
- [11] **Donnellan, A.**, J. Parker, J. Rundle, G. Fox, P. Stolorz, J. Salmon, J.B. Minster, T. Henyey, T. Jordan, L. Grant, T. Tullis, L. Kellogg, D. Turcotte, 1999, A New Architecture for analyzing and exploring space-based geodetic data: General Earthquake Models Computational Infrastructure, submitted to NASA AIST RFI, June 1999.
- [12] Silver, P., et al., 2000, The Plate Boundary Observatory, Creating a Four-dimensional Image of the Deformation of Western North America, submitted to the National Science Foundation, May, 2000.

Certifications

NASA certified small UAV pilot and ground control operator
 Commercial instrument rated single engine land and sea plane pilot (~500 hours)
 Have flown in the US, Mexico, Canada, and Africa
 PADI Open Water scuba diver
 Dives include California, Hawaii, Palau, Australia, and Caribbean

Field Experience

California active faults, Small Uninhabited Aerial Vehicle (sUAV) observations to collect structure from motion (SfM) observations to compute geomorphic metrics (2015–present)
 Marie Byrd Land, Antarctica: development, reconnaissance, deployment and maintenance of three autonomous GPS stations on bedrock, 1998 (7 weeks), 1999 (4 weeks), 2001 (5 weeks).
 White Wolf Fault region (near Tehachapi California): GPS surveying, 1997
 Dry Valleys, Antarctica: reconnaissance and deployment of autonomous GPS system, 1996 (3 weeks)
 Western Mongolia: reconnaissance of earthquake faults for GPS stations to study intracontinental deformation, collecting mud cores from the bottom of Lake Hovsgol (3 days), 1996 (1 month)
 Northridge earthquake region: repeated GPS surveys following the Northridge earthquake, 1994–1997
 Altiplano, Bolivia: differential GPS surveying of paleoshorelines on the Uyuni Salt Flat, 1993 (3 weeks)

San Andreas fault, Carrizo Plain: GPS surveying of 1855 historical section markers, 1991–1993
 Southern California: Precise GPS surveying in approximately yearly experiments in the Ventura basin region, Channel Islands, and other areas throughout southern California, 1986–1993
 Variegated Glacier, Alaska: surveying and operation of seismometer, 1986 (6 weeks)
 Southern California geology: three academic quarters mapping the Sierras, Mojave Desert, and Salton Trough at Caltech, 1986–1987. One additional quarter of field trips throughout California, 1989
 Utah: geologic mapping for Ohio State University summer field camp, 1984 (6 weeks)
 West Antarctic Ice Streams: surveying, collecting ice cores, and operation of satellite receivers, 1983 (9 weeks), 1984–1985 (8 weeks), 1985 (4 weeks)

Selected Talks, Briefings, and Appearances

Briefings

Uninhabited Aerial Vehicle Synthetic Aperture Radar Observation of Recent Earthquakes in California, California State Seismic Safety Commission, January 2016.
Recent Advances in Earthquake Studies using NASA Technologies, State Assemblyman Chris Holden, October 2015
Finding Faults: How UAVSAR is Revealing Earthquakes' Broad Reach, NASA Headquarters brown bag seminar to the Science Mission Directorate, March 2015
NASA technology for earthquake studies, with an example from the March 28th La Habra earthquake, Public earthquake roundtable discussion "Innovation and Investment in Earthquake Safety," University of California, Irvine, August 2014
UAVSAR: Recent Earthquakes Imaging Recent Earthquakes and Ground Motion from an Airborne Platform, Seismic Safety Commission, June 2014
Using Space Technology to Understand Earthquakes, California Second Annual Aerospace Week, State Legislature, Sacramento, March 2013
 Briefing to Anne Castle, Assistant Secretary for Water and Science, *Earthquake Information Systems Mitigating Earthquake Hazard by Integrating and Modeling GPS, InSAR, Seismicity, and Fault Observations*, JPL, October 2011
 Briefing to Senator Feinstein's staffers on *earthquake preparedness*, with Caltech and USGS, April 2010
NASA's Natural Disaster Program and Decadal Survey Missions, Briefing to the White House CENR Subcommittee for Disaster Reduction, September 2009
DESDynI Mission, Briefing to NASA Science Mission Directorate Office of Management and Budget Examiner, August 2008.
DESDynI Earth Science and Applications from Space Decadal Survey Mission, Briefing to Senator Barbara Boxer's staff, August 2007.
QuakeSim: Understanding Earthquakes from Spaceborne Data and Modeling, briefing to Alan Stern, Associate Administrator for NASA Science Mission Directorate, June 2007
DESDynI, briefing to Mike Freilich, head of Earth Science, NASA SMD, May 2007
 House Science Committee, April 2004
 Jason Rothenberg, OMB examiner for NASA Code Y, February 2004
 Chip Groat, Director of the US Geological Survey, January 2003
 Michele Burkett, Staff Assistant, House Committee on Appropriations, January 2003
 John Marburger, President's science advisor, December 2003
 Congressional Committee on Science Research, November 2003
 Margaret Leinen, NSF Deputy Director for Geosciences, October 2003
 Mike O'Brien and Joe Wood, NASA HQ, Code I, August 2003
 Amy Kaminski, OMB examiner for NASA Code S, August 2003

Briefed NASA Associate Administrator Ghassem Asrar on solid earth computational technology needs, May 2002.

The Use of Space Technology to Study Earthquakes, Caltech Visiting Committee to JPL, January 2002; NASA Administrator Sean O'Keefe visit to JPL, January 2002; Caltech business managers, February 2002

Participated in briefing Ghassem Asrar, NASA Associate Administrator for Code Y, on Solid Earth Science Working Group plan, March, 2001

Briefed science and technology division head of a DOD agency on the use of gravity measurements to detect underground mass anomalies, September 2000

Briefed Representative Nick Smith (Mich.) and staffer on NASA contributions to Solid Earth and Natural Hazards, January 2000

Briefed Jack Kaye (NASA HQ, Code Y) on GEM, August 1999

Briefed Seismic Safety Commission on JPL technological contribution to earthquake studies and hazard mitigation, May 1999

Briefed David Clement, Chief of Staff, House Committee on Science, February 1996

Space technology and earthquakes briefing to Congressman Dreier, February 2003

Space technology and earthquakes briefing to Congressman Rhorabacher, February 2003

Talks

Studying Earthquakes from Space

Santa Monica College, Distinguished Scientists Lecture Series, October 2016

Indiana University Science Gateways class lecture, September 2016

University of San Francisco Math/Stat Colloquium on Uncertainty Quantification, April 2016

The Past, Present and Future of Understanding Earthquakes using Space Observations, Arizona State University, School of Earth and Space Sciences Colloquium, January 2016.

The Past, Present and Future of Understanding Earthquakes using Space Observations, Coast Geological Society, November 2015

Application of Geodetic Imaging Methods to Studying Earthquakes, USC Graduate Seminar guest lecture and tutorial, November 2015

GeoGateway UAVSAR Tutorial, NISAR Mission Applications Workshop, October 2015

UAVSAR Observations of Coseismic and Triggered Slip for Recent Earthquakes in California, USC Graduate Student Seminar, March 2015

UAVSAR Observations of Broad Slip Patterns Associate with the El Mayor – Cucapah, La Habra, and South Napa Earthquakes, Caltech Tectonics Observatory Seminar, December 2014

Understanding Earthquakes Using Space Observations, Keck Institute for Space Studies, April 2014

JPL Science 101 Lecture, *Understanding Earthquakes using QuakeSim*, January 2013

USC Seminar, Combining geodetic imaging with crustal deformation modeling to infer fault behavior, September 2012.

USC Geology 505: Introductory Graduate Seminar in Earth Sciences, *QuakeSim, Using Space Technology to Study Earthquakes: Mitigating Earthquake Hazard*, 2011

Altadena Rotary Club, *How 4-H influenced a career in earthquake science and a desire to inspire the next generation*, 2011

St. John's Physicians Alumni Association, *QuakeSim, Using Space Technology to Study Earthquakes: Mitigating Earthquake Hazard*, 2011

JPL Earth Day, *Our Trembling Earth*, 2011

Using Space Technology to Study Earthquakes and Volcanoes, Aveson Charter School, January 2010

QuakeSim: A Distributed Computing Environment for Improved Understanding of Earthquakes, Keynote talk, Summit '09: Partnerships in Computational Infrastructure Development, Banff, Canada, October 2009.

Using Space Technology to Study Earthquakes, Meadows Neighborhood Association, Altadena, California, May 2007

Living on a Restless Planet: Using Space Technology to Study Earthquakes, The Arnold O. Beckman Annual Science Lecture, Irvine, California, September 2006

Living on a Restless Planet: Using Space Technology to Study Earthquakes, Rotary Club, Altadena, California, August 2006

Interferometric Synthetic Aperture Radar (INSAR), NASA Advisory Council, JPL, May 2006

From program goals to level 1 requirements, JPL Project Manager Class, October 2008, May 2006

Butterflies, Children, Earthquakes, and Space Technology, lunchtime speaker for MUSES of the California Science Center Woman of the Year award, April 2006

A Cool View of Earthquakes and Volcanoes from Space, workshop at Sally Ride Science Festivals, UCLA, November 2003, Cal State University Los Angeles: April 2010, March 2008; Caltech: March 2002, 2003, 2005, 2006; Riverside: November 2002

Using Einstein's Theory of Relativity for Space Technology to Study Earthquakes, 7th Annual Bohn-Meyer Math and Science Odyssey lunch speaker, Lancaster, California, December 2005

Living on a Restless Planet, Using Space Technology to Study Earthquakes
 JPL Summer Student Seminar Series, July 2007
 AAPG, JPL, March 2007
 Juniper Hills Town Council, California, June 2006
 Kern Antelope Historical Society, Lancaster, California, May 2005
 AIAA Chapter, Lancaster, California, September 2005
 Mojave Region High School 4.0 Dinner talk, April 2005
 Kern Antelope Historical Society, Rosamond, California, April 2005
 Patuxent River Navy Test Pilot School, March 2005
 IEEE Aerospace Conference Plenary Speaker, Big Sky, Montana, March 2005
 Navy League, Bakersfield, February 2005
 Mineralogical Society of Southern California, December 2004
 NASA Summer High School Apprenticeship Research Program, June 2004
 Norma Coombs Career Day, May 2006

Earthquake talk and demonstration, Norma Coombs Alternative School, Pasadena, California, 2006

Career Talk, Norma Coombs Alternative School First Grade, December 2004

Talked to Girl Scout master trainer about my work and work at JPL, October 2004

Our Restless Planet, 2004 Caltech Alumni College, June 2004

Understanding Earthquakes from Space, Beverly Hills Forum, June 2004

Using Space Technology to Understand Earthquakes and Land Surface Processes, K-5th grade French/American School Lycee International de Los Angeles (LILA), Monrovia Campus, March 2004

Living on a Restless Planet, Earth Science Research and Applications: Geodetic Infrastructure as Enabling Technology, Talk on Behalf of Ghassem Asrar, NASA HQ, International GPS Service 10th anniversary symposium, Bern, Switzerland, March 2004. *Understanding Earthquakes from Space*, Stanford Professional Women of Los Angeles, January 2004

Using Space Technology to Understand Earthquakes
 IEEE Women in Engineering, Ventura Chapter, October 2003
 Adventurer's Club, Los Angeles Chapter, April 2003
 3rd–5th graders at St. Elizabeth's School in Altadena, California, April 2003
 Von Karman Public Lecture, JPL and Pasadena City College, January 2003
 JPL Acquisition Division, November 2002
 40th anniversary of planetary exploration, California State Capital, Sacramento, August 2002
 California State University, Fullerton, October 2001

Plate Tectonics and You: A Cool View of Earthquakes

Happy Valley School, Summer Science Program to high school students, July 2003

Earthquakes

6th grade class, Monte Vista School, La Crescenta, California, September 2001

Association of Engineering Geologists, May 2001

Botball participants at JPL, April 2001

El Monte elementary and middle school students (800 students), February 1998

California State University, Northridge, November 1997

Sheppard, Mulling, Richter, and Hampton Law Firm, September 1996

Caltech Summer Undergraduate Research Fellows, July 1996

GPS and InSAR talk to JPL Summer Interns, July 2001

IT for Science, JPL IT Symposium, May 2001

Modeling crustal deformation and earthquakes, JPL Summer Co-ops, June 2000, July 1999, June 1997

High-performance computational needs for Solid Earth, NASA HQ Summit on Computational Resources needed for Earth Sciences, June 2000

Antarctica, U.S. Navy League, Bakersfield, California, January 2000

Space-Based Geodynamics,

LA Chapter of College of Fellows Institute for the Advancement of Engineers, JPL, January 2000

Summer Faculty Fellows seminar, JPL, June 1999, June 1997

Natural Hazards Case Study, NASA Workshop on Issues in the Application of Data Mining to Scientific Data, Huntsville, Alabama, October 1999

Tutorial on LA basin dynamics at the GEM workshop in Syracuse, New York, June, 1999

GPS applications to modeling crustal deformation and earthquakes

Geography Instructors (GENIP) for JPL Educational Affairs Office, 1999, 1998

Thatcher summer school course (1994, 1996, 1999, 2000, 2001)

Coast Geological Society, February 1999

Distinguished lecture series, University of Utah, December 1997

UCLA seminar, June 1997

Scholarship fund for women in engineering, January 1997

Central Washington University seminar, May 1996

University of California, Riverside seminar, May 1996

Antarctica, Kern Antelope Historical Society, March 1999

Earthquakes in southern California, Kern Antelope Historical Society, October 1998

Career path, life, and response to stress, JPL Advisory Council for Women panel on March 1999

Geodetic models and data USC graduate student seminar on, 3 hour course, April 1998

Hosted tour for JPL for Southern California Earthquake Center summer interns, August 1998

Northridge earthquake seminar, Caltech, March, 1997

Fulfillment Fund Career Day, March 1997

Rolling out of the Southern California Integrated GPS Network with Daniel Goldin, Rialto High School, October 1996

Other External Recognition and Media Appearances

NASA earthquake study finds big trouble for L.A., CNN, October 2015

NASA raises the odds for 5.0-plus earthquake here to nearly 100 percent within three years, Orange County Register, October 2015

JPL, UCI scientists say a big earthquake is all but inevitable by 2019, AirTalk, KPCC, October 2015

Eight Seconds of Terror, A JPL Scientist Reflects on L.A.'s Last Big Quake, January 2014

How to Prepare for an Earthquake, America Now News, April 26, 2012

California Overdue for Major Earthquake, Fox News, August 2010
 Ground Shaken by Mexico Quake Still Moving, MSNBC, August 2010
 Use of GPS System for Studying Earthquake, LA Times interview, April 2010
 Ground Motion Studied in Water Main Breaks, AP, 40 articles, October 2009
 DWP Recruits JPL to Study Water Main Breaks, and Ground Water Examined as Factor in Water Main Breaks, Los Angeles Times, October 2009
 Coming Soon, Your Local Earthquake Forecasts, National Geographic News, April 12, 2009
 Big Bay Area Quake Likely Within 20 Years, Experts Say, National Geographic News, April 14, 2009
 Interviews on NASA's UAVSAR and earthquake work on KNBC, KTLA, and KABC, April 2009
 NASA radar helps predict The Big One, Desert Sun, June 22, 2009
 Computer puts big quake odds at 25% within 20 years, San Francisco Chronicle
 City Council wants more answers on water main breaks, Southern California Public Radio 2009
 LA councilman flouts DWP's water conservation rules, Contra Costa Times
 Henry Ford Museum interview on innovation, March 2009
 Geology video discussion in Narnia exhibit, US Science Museums (currently Phoenix), 2008
 10 minute live interview: KFWB News Radio, April 2006
 Live shots: KPCC "Air Talk", APTN, Washington DC, KAZY TV, Modesto, Discovery Channel, Canada, ABC News Now, New York, KGO-TV, San Francisco, KLAS-TV, Las Vegas, Al Hurra Middle Eastern TV, KUSA TV- Denver, April 2006
 NationalGeographic.com interview in "Coming Soon? Your Local Earthquake Forecasts," 2005.
 National Geographic interview for documentary on natural disasters in movies, aired March 2006
 Profiled on *Women in Space* poster by Sally Ride Science, 2005
 Space.com interview in "Digital Temblors: Computer Model Successfully Forecasts Earthquake Sites." 2004.
 Nature Magazine interview in "Standing Room Only Signals US Zeal for Earth Imaging." 2004
 Profiled in *What Do You Want to Be? Explore Space Sciences* booklet, Sally Ride Science, 2004
 Numerous print interviews on InSAR, computing, and earthquake forecasting, including space.com, Pasadena Star News, October 2004
 Live interview on Fox National News on InSAR, computing, and earthquake forecasting, October 2004
 Taped TV interviews on KNBC, KTLA, KABC, and Fox affiliate on earthquake forecasting using pattern recognition and the use of InSAR for studying earthquakes, October 2004
 ASEE Prism Magazine interview in "Taking a Crack at Predicting Quakes," 2003
 Live interview with Los Angeles based radio station, KFWB, on recent earthquakes and InSAR, September 2003
 Profiled in *Women of Space: Cool Careers on the Final Frontier*, Laura S. Woodmansee, Apogee Books, 2004
 ABC affiliate TV interview on earthquake prediction by UCLA Professor Keilis-Borok, April 2004
 Taped interview for Los Angeles based radio station, KFWB, QuakeSim, InSAR, and Earthquakes, January 2004; segments aired through April 2004
 Live interview with Los Angeles based radio station, KFWB, on InSAR and computing, December 2003
 NASA Earth Science Update, Washington D.C., December 2003
 Live interviews on QuakeSim Computational Technologies project, including CNN Headline News and top story feature on Next@CNN, May 2003
 Filmed to be featured in an exhibit on earthquakes, New York's Natural History Museum, April 2003.
 Featured in NASA Science files Tree House Detectives *Case of the Shaky Quake*
 Profiled in Sally Ride Science Club Newsletter, March 2003
 Profiled on NASA/Langley's Tree House Detectives web page, January 2003

Participated in JPL's Women in Science Webcast, January 2002
 Profiled on JPL's web page
 Live interviews on observed post seismic motions from the Northridge earthquake, September 2002
 Cited by NASA Administrator Sean O'Keefe as the "face of NASA's future science" in his pioneering the future speech, April, 2002
 Featured in JPL's video Journey to the Planets and Beyond shown at the 40th Anniversary of Mariner II at the Smithsonian Air and Space Museum
 Participated in Warner TV Community Forum ½ hour exclusive TV interview in March 2002 to promote the Sally Ride Science Festival
 Featured in Earth & Sky radio series for work on earthquake modeling, January 22, 2001. Earth & Sky is heard by 4 million listeners on 700 U.S. radio stations
 Profiled in *Statistics: The Craft of Data Collection, Description, and Inference*, William F. Stout, Barbara A. Bailey, Xuming He, Ditlev Monrad, Louis Roussos, et al, textbook for 4 year colleges, Möbius Communications
 On Cover of Los Angeles Times Magazine with six other JPLers and featured in JPL cover story, 1999
 On NBC Nightly News and MSNBC for work related to using GPS to assess earthquake hazard in the metropolitan Los Angeles area, August 1999
 Los Angeles Times High Tech Career profile in Business Section, April 1997
 Pasadena Star News Op-ed (requested) "Career Women Can Help Forge Better Society," 1997
 Lifetime Television Women's Summit invited and featured participant, March, 1997
 Profiled in *The Physical Universe*, 8th ed., college textbook, Donrad B. Krauskopf and Arthur Besier, McGraw Hill, 1997. To appear in 9th edition
 Featured in National Geographic's book entitled *Raging Forces*
 Featured twice on CNN, including CNN Future Watch 1997, 1995
 Featured in NOVA: Killer Quakes, 1994
 Featured on SciFi Channel science program
 Featured on Discovery Channel
 Featured in Los Angeles Times Column One, 1994
 Participated in the 1994 Northridge Earthquake press briefings at the request of Caltech's Seismological Laboratory
 Regularly interviewed for TV and print: e.g. Los Angeles Times, all major networks following the 1994 Northridge Earthquake, USA Today – 1999, NBC Nightly News twice in 1999, MSNBC, local television
 Featured on Swiss Television, 1997
 Interviewed for French Newspaper, 1997
 Wrote and narrated two LA Underground spots for KFWB News 98 Radio, 1994–1996